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ABSTRACT

This guide was developed by the Environmental Protection Agency (EPA) to provide students with information about potential environmental careers with the agency. The brochure presents an overview of the EPA and its efforts to preserve the environment; and describes environmental public service careers, in general, and how scientists, engineers, attorneys and environmental protection experts are employed by the EPA, in particular. A concluding section highlights the availability of financial assistance with which students can pursue higher education, and potential work experience at EPA facilities. Lists of sources of environmental career information and EPA human resources offices are provided. (MDH)

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WORKING FOR THE ENVIRONMENT STUDENT GUIDE

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UNITED STATES ENVIRONMENTAL PROTECTION

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ENVIRONMENTAL CAREERS OFFER AN EXCELLENT OPPORTUNITY TO DO SOMETHING WORTHWHILE FOR YOUR COMMUNITY AND YOUR COUNTRY.

IF YOU WANT TO LEARN MORE ABOUT ENVIRONMENTAL CAREERS AND THE U.S. ENVIRONMENTAL PROTECTION AGENCY THIS BROCHURE HAS BEEN PREPARED FOR YOU.

PRESERVING OUR FUTURE TODAY

EPA Highlights

- In 1974, the Safe Drinking Water Act allowed EPA to establish regulations to limit the amount of various substances in water used for drinking.
- The new Clean Air Act contains provisions for large reductions in emissions of sulfur dioxide and nitrogen oxides to combat acid rain.
- The new national goal for year 2000 is to reduce SO_2 emissions nationwide by 10 million tons.
- The Resource and Recovery Act regulates hazardous wastes so they are properly treated and do not continue to spoil our earth's soils.
- Work is underway to reduce municipal solid waste by 25 percent through a combination of source reduction and recycling measures.
- The 1987 Clean Water Act amendments require certain industries to "pretreat" their wastewater so that toxic chemicals and other harmful substances do not enter sewage systems that were not designed to treat them.

The challenges which are before us in the environmental arena will require professionals from many, many different backgrounds. The increase in environmental awareness is more than a trend, the environment is an issue continuously gaining importance in people's lives, politics, science and technology. Opportunities for meaningful and rewarding careers in meeting our environmental goals will be as diverse as the environment itself. There will be an expanded range of opportunities in skilled administrative, professional, and technical areas generated by national and state legislation, as well as grassroots activities. • But where will the jobs be? What should I study? Is there a need for special training? • The [illegible] will be for scientists and [illegible] and engineers are instrumental in research and development; looking at new ways to address the concerns of how much of certain [illegible] actually dangerous, developing innovative techniques to promote pollution prevention, and exploring [illegible] important issues related to the interconnectedness of the biosphere. Scientists and engineers are also critical to the development of regulations based on their research, which provide standards for industry, government and individuals to maintain and improve our environment. • The growth in opportunities in environmental law reflect the growing complexities of the regulations and the increased emphasis on enforcement. Attorneys are finding the environmental field rich with opportunity for public service, as well as, private sector careers working with industry. • Critical skills in managing the business of the environment include such occupations as accountants, economists, writers, educators, technicians, computer specialists, information management specialists, and administrative specialists. From federal job opportunities to small grassroots organizations there are needs for talented, dedicated professionals who can design, implement and enforce environmentally sound programs. • Environmental careers offer an excellent opportunity to do something worthwhile.

IF YOU WOULD LIKE MORE INFORMATION ON WHAT YOU CAN DO TODAY TO HELP THE EARTH, PLEASE REFER TO THE REFERENCES AT THE END OF THE BROCHURE.

ENVIRONMENTAL CAREERS

The need to preserve and protect our earth and its natural resources is important to you and me. It is important because we need clean air and water to live healthy lives; we need to be protected from hazardous and toxic substances; and we need to find ways to reduce the trash that we create to save our important land resources for use other than land fills. Many of you may already be "environmentally conscious" by being part of the effort to protect our Earth. For example, if you recycle cans, newspapers and glass, you are participating in an effort to prevent pollution. Individuals will make a difference by making simple changes in their day-to-day lives, like reducing the use of their automobile because of the emissions from the engine, reusing materials and recycling. • The issues and challenges of protecting and cleaning the environment will also require teams of professionals to conduct research, develop regulations, provide on-going education, develop innovative technologies to reduce, reuse and recycle potential pollutants, and clean-up hazardous sites. • If you want to learn more about environmental careers and the U.S. Environmental Protection Agency this brochure has been prepared for you. • If you would like more information on what you can do today to help the Earth, please refer to the references at the end of the brochure.

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CAREERS IN ENVIRONMENTAL PUBLIC SERVICE

There are many opportunities for you to serve your nation and the global population through public service careers. You could choose to serve your local community or state, or participate on an international level with a private voluntary organization like the Sierra Club.

The people who work at the federal level for the U.S. Environmental Protection Agency are dedicated to improving and preserving the quality of the environment. Our nation's continuing growth and prosperity depend on our ability to find effective, creative solutions to environmental problems. Through team work and scientific discipline, EPA is determined to find those solutions — and to make them work.

MAKING A DIFFERENCE THROUGH THE ENVIRONMENTAL PROTECTION AGENCY

Few jobs are more gratifying than working with EPA. Here's why. The environment will be the worldwide focus of the future. We are anticipating an even more active and accelerated agenda, which means there will be an increased amount of strategic and long-range challenges ahead. We are committed to using progressive quality management processes that encourage teamwork and promote innovative and effective solutions. Public service offers a unique opportunity to work for the common good of our country.

INTRODUCTION TO EPA. . .

We're a dynamic team of diverse people dedicated to improving and preserving the quality of the environment. ▲ The United States Environmental Protection Agency (EPA) was founded in December 1970 to consolidate the government's environmental regulatory activities into a single agency. Over the past 20 years, EPA has greatly expanded its scope and responsibilities in meeting environmental challenges. ▲ Located in Washington, D.C., EPA headquarters is divided into twelve offices: Office of the Administrator; Office of Water; Office of Solid Waste and Emergency Response; Office of Air and Radiation; Office of Prevention, Pesticides and Toxic Substances; Office of Research and Development; Office of Administration and Resources Management; Office of Enforcement; Office of General Counsel; Office of Policy, Planning and Evaluation; Office of International Activities; Office of Inspector General. These offices develop environmental policies, set standards, manage complex research and development programs, and develop regulations for pesticides, toxic substances, hazardous wastes, air, radiation and water. In addition, every EPA program office is developing new technologies designed to prevent pollution. ▲ There are also ten Regional Offices which administer EPA programs and provide technical assistance to state, local and tribal governments. World-class research and development in all the environmental disciplines is carried out in our 20 research facilities. ▲ At last count, EPA employed almost 19,000 and the numbers continue to grow.

Treatment and disposal of waste are not enough; pollutants must be prevented from being generated in the first place. We have learned the inherent limitations of treating and burying waste. A problem solved in one part of the environment may become a new problem in another part. We must curtail pollution closer to its point of origin so that it is not transferred from place to place.

SETTING STANDARDS

EPA is responsible for setting standards that help protect the public's health and welfare. Whether this involves restricting pesticide use or setting emission levels for automobiles, EPA is taking steps to ensure a cleaner future.

ENFORCEMENT AND MONITORING

The Agency's philosophy has been to encourage voluntary compliance by private industry and communities, and ensure that state, local and tribal governments perform enforcement activities necessary to meet EPA standards.

Various types of monitoring processes and activities exist within EPA. Some are broadly based monitoring programs that determine whether pollution levels and emissions are increasing or decreasing. Other methods of evaluation determine if the various abatement programs developed by EPA and state and local governments are as effective as they should be.

TRENDS FOR THE FUTURE

EPA's 20 year efforts toward a cleaner environment and improved human health have been vigorous. Worldwide, the belief that industry cannot endure the restrictions of environmental controls, is being replaced by an awareness of industry's role in nurturing the environment. Protecting the planet is a huge commitment and to be successful it will take everyone working together. Complementing EPA's efforts have been state, tribal and local governments, citizen's environmental organizations, and countless individuals, many of whom have been working on pollution control for years. EPA has developed five new themes which reflect future directions for ensuring a cleaner environment: pollution prevention, voluntary action, reducing risks, economic incentives, protecting natural resources. It's time to develop a new pattern of environmental management — working with nature.

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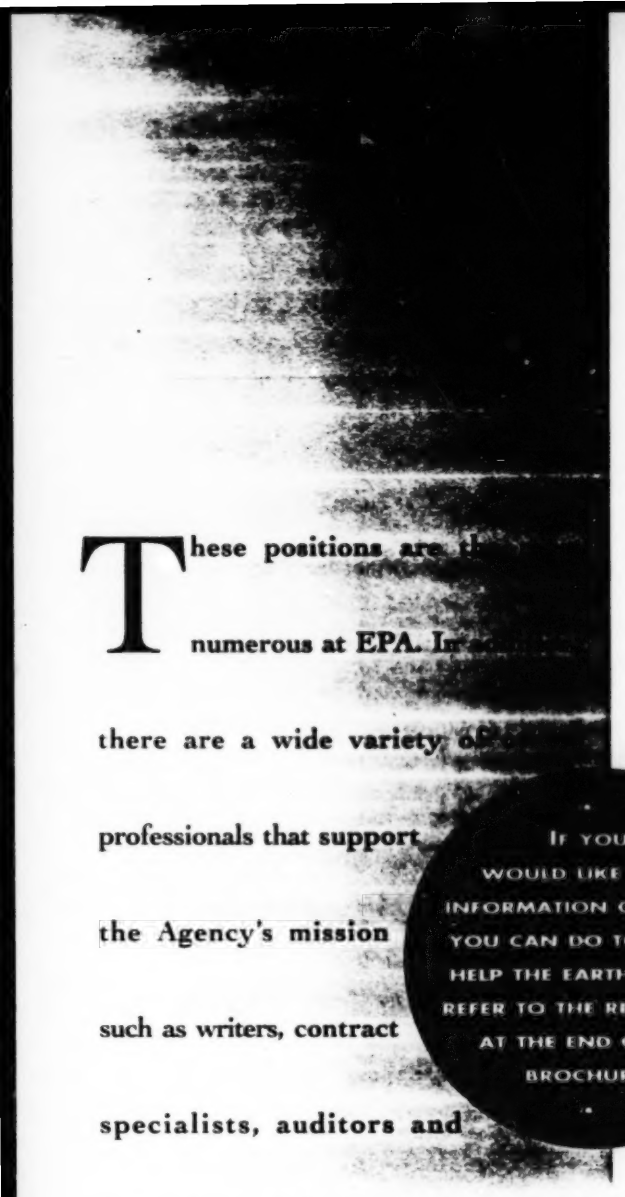

These positions are [illegible] numerous at EPA. In [illegible] there are a wide variety of [illegible] professionals that support [illegible] the Agency's mission [illegible] such as writers, contract specialists, auditors and accountants, budget analysts, financial specialists and attorneys.

IF YOU WOULD LIKE MORE INFORMATION ON WHAT YOU CAN DO TODAY TO HELP THE EARTH, PLEASE REFER TO THE REFERENCES AT THE END OF THE BROCHURE.

SCIENTISTS

Environmental scientists directly protect the environment, manage projects, and develop policies and regulations. Some also perform ecological research or testing so the EPA will have the reliable scientific data it needs to make decisions. Many environmental scientists become EPA generalists, as non-supervisory contributors, program managers, or supervisors. ▲ All physical and biological science professionals have at least a bachelor's degree in their field, and many doing research in EPA laboratories have doctoral degrees. Project management experience, communication skills, skills in dealing with people, and knowledge of environmental laws and regulations are all helpful.

ENGINEERS

Engineers work throughout the EPA, carrying out research, regulation, and compliance functions. Many engineers go beyond "hands on" engineering. They may, for example, develop policy, write regulations to implement legislation, issue permits, or admin- ister regulations. Some engineers are experts on particular technologies, industries, or pollutants, advising the public, EPA offices and other governments. ▲ EPA engineers look at more than engineering issues. They often work on multi-disciplinary teams and enjoy the breadth of outlook this provides. A bachelor's degree or greater will qualify you for an entry level position. We particularly seek individuals with majors in civil, chemical, mining, geological and environmental engineering.

ATTORNEYS

Attorneys at EPA provide an invaluable service to the public by being part of the teams which develop regulations consistent with legislation, serve as legal advisers in the development of policy, assist in resolving legal, technical, and enforcement issues, and serve as EPA's trial staff before administrative tribunals. To do this, EPA lawyers must become familiar with complex areas of environmental science, public health, or the technology of specific types of pollution control. Attorneys are also important to administrative business at EPA, such as in the area of contract management. Law school graduates are eligible for appointment to attorney positions.

ENVIRONMENTAL PROTECTION SPECIALISTS

Environmental Protection Specialists (EPS) perform a wide variety of duties in EPA. The work of an EPS often overlaps with the work of professional engineering and scientific positions. ▲ An EPS in a region often oversees the environmental plans and activities of state and local municipalities. The EPS gives technical guidance and helps develop sound plans and programs. EPS's conduct research related to environmental problems and they may develop environmental protection regulations, policies, and guidance. Oral communication skills are necessary when negotiating and coordinating complex environmental issues. Most EPS have strong research and analytical abilities.

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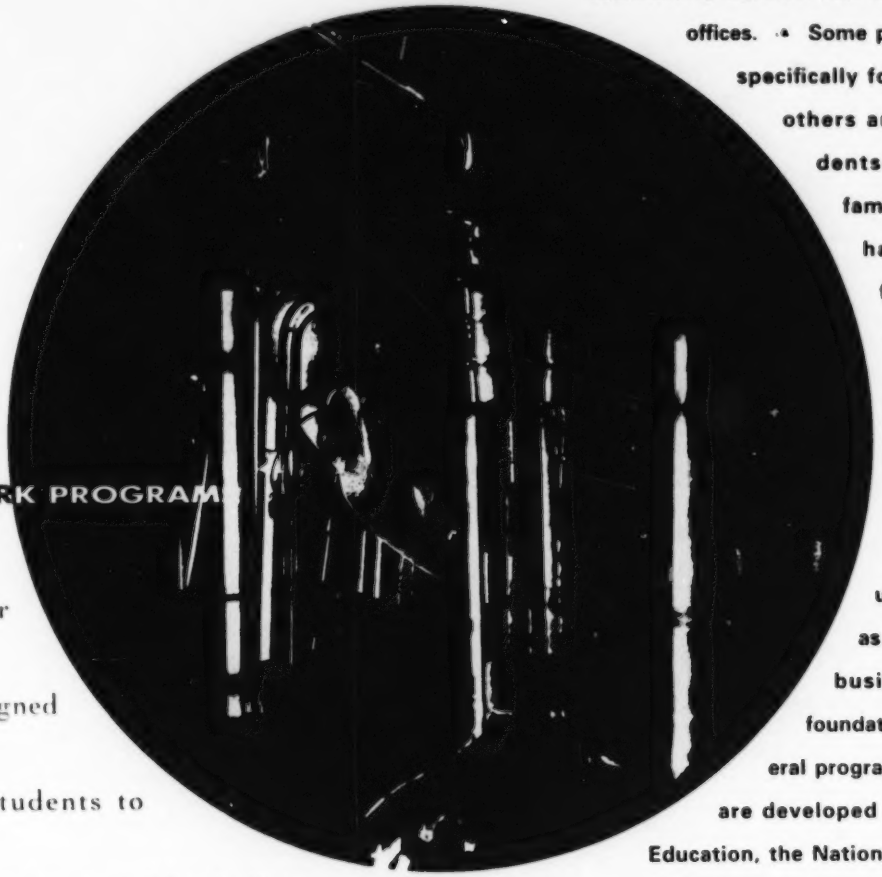
FINANCIAL ASSISTANCE

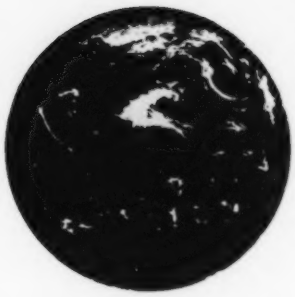
National commitment to higher education is demonstrated by the many financial assistance programs that are available to students in this country. The door to greater career opportunity is opening wider than ever before to many who have been excluded in the past, such as women, Hispanics, African-Americans, Native Americans, people with disabilities and others. In setting career goals, students should keep in mind the many programs designed to help them finance their education. ▲ Millions of students receive financial assistance every year. Any student who is not sure where to find help should consult teachers, guidance counselors, libraries and university student aid offices. ▲ Some programs are designed specifically for minority students, others are designed for students from low-income families. Some programs have been developed for those interested in certain fields of study, such as engineering. ▲ Besides federal programs, there are scholarship programs maintained at individual universities, as well as programs operated by businesses and private foundations. Some of the federal programs worth looking into are developed by the U.S. Office of Education, the National Science Foundation and the U.S. Department of Energy. ▲ Above all, don't wait. There are so many options for you to consider that it may take some time but is well worth the effort.



STUDENT WORK PROGRAMS

There are a number of programs designed especially for students to receive work experience at EPA facilities. Through cooperative education, internships, and volunteer opportunities you may get a first hand look at working in the public service. Please refer to our EPA offices and other brochures for more information.

There are other brochures and pamphlets available to those interested in pursuing careers with the EPA. If you have not already received the information you need, please call your nearest EPA office and ask for the Human Resources Office. For information on how to help and what to look for call or write EPA's Public Information Center (202) 260-2080, PM 211B, 401 M Street, S.W., Washington, D.C. 20460.



SOURCES OF ENVIRONMENTAL CAREER INFORMATION

Environmental Newsletters

Environmental Opportunities
Box 670
Walpole, NH 03608

Job-Scan
The Student Conservation Association., Inc.
P.O. Box 550
Charleston, NH 03603

The Job Seeker
Rt. 2, Box 16
Warrens, WI 54666

The Nature People Career Services
P.O. Box 98
Warrens, WI 54666

Environmental Careers Circulation Dept.
760 Whalers Way
Suite 100-A
Fort Collins, CO 80525

Environmental Periodicals

Resource Recycling
P.O. Box 10540
Portland, OR 97210-9893

Biocycle
Journal of Waste Recycling
Emmaus, PA 18049

Buzzworm
P.O. Box 6853
Syracuse, NY 13217-7930

E: The Environmental Magazine
P.O. Box 6667
Syracuse, NY 13217-7934

Garbage
P.O. Box 51647
Boulder, CO 80321-1647

Friends of the Earth
218 D Street, SE
Washington DC 20003
202 544-2600

World Watch
P.O. Box 6991
Syracuse, NY 13217-9942

Environmental References

The Complete Guide to Environmental Careers
Island Press
Box 7, Dept. 4CC
Covelo, CA 95428

Environmental Organizations

Citizens for a Better Environment (Pollution Control)
33 E. Congress
Suite 523
Chicago, IL 60605
312 939-1530

Earth First
P.O. Box 5871
Tucson, AZ 85703
602 622-1371

Environmental Action (EA)
1525 New Hampshire Ave. NW
Washington D.C. 20036
202 745-4870

Friends of the Earth
218 D Street, SE
Washington DC 20003
202 544-2600

National Clean Air Coalition (NCAC)
801 Pennsylvania Ave. SE
3rd Floor
Washington DC 20003
202 543-8200

National Energy Foundation (Environmental Education)
5160 Wiley Post Way
Suite 200
Salt Lake City, UT 84116
801 539-1406

Sierra Club
730 Polk Street
San Francisco, CA 94109
415 776-2211

EPA does not necessarily endorse these publications. This list is provided as a sample of available information

EPA HUMAN RESOURCES OFFICES

EPA Headquarters
401 M Street, SW
Room 3020
Washington, DC 20460
202 260-3266

Regional Offices

EPA Region 1
JFK Office Building
Boston, MA 02203
617 565-3719

EPA Region 2
26 Federal Plaza
New York, NY 10278
212 264-0016

EPA Region 3
841 Chestnut Street
8th Floor
Philadelphia, PA 19107
215 597-8922

EPA Region 4
345 Courtland Street, NE
Atlanta, GA 30365
404 347-3486

EPA Region 5
77 West Jackson Blvd
(MP-4J)
Chicago, IL 60604
312 353-2026

EPA Region 6
1445 Ross Avenue
(6M-HP) 12th Floor
Dallas, TX 75202-2733
214 655-6560

EPA Region 7
726 Minnesota Avenue
Kansas City, KS 66101
913 551-7041

EPA Region 8
999 18th Street
Suite 500
Denver, CO 80202-2405
303 293-1487

EPA Region 9
75 Hawthorne Street
San Francisco, CA 94102
415 744-1300

EPA Region 10
1200 Sixth Avenue
Seattle, WA 98101
206 553-2959

Research and Development Laboratories

EPA
MD-29
Research Triangle Park, NC
27711
919 541-4268

EPA
26 W Martin Luther King Dr
Cincinnati, OH 45268
513 569-7812

EPA
P.O. Box 98516
Las Vegas, NV 89193-8516
702 798-2401

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Duluth, MN
Edison, NJ
Grosse Ile, MI
Gulf Breeze, FLA
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Warrenton, VA

Field Offices

EPA
Building 53
Box 25227 (DFC)
Denver, CO 80225
303 236-5114

EPA
2526 Plymouth Road
Ann Arbor, MI 48105
313 668-4226

Another way to help our environment

pass these materials on to another interested environmentalist.

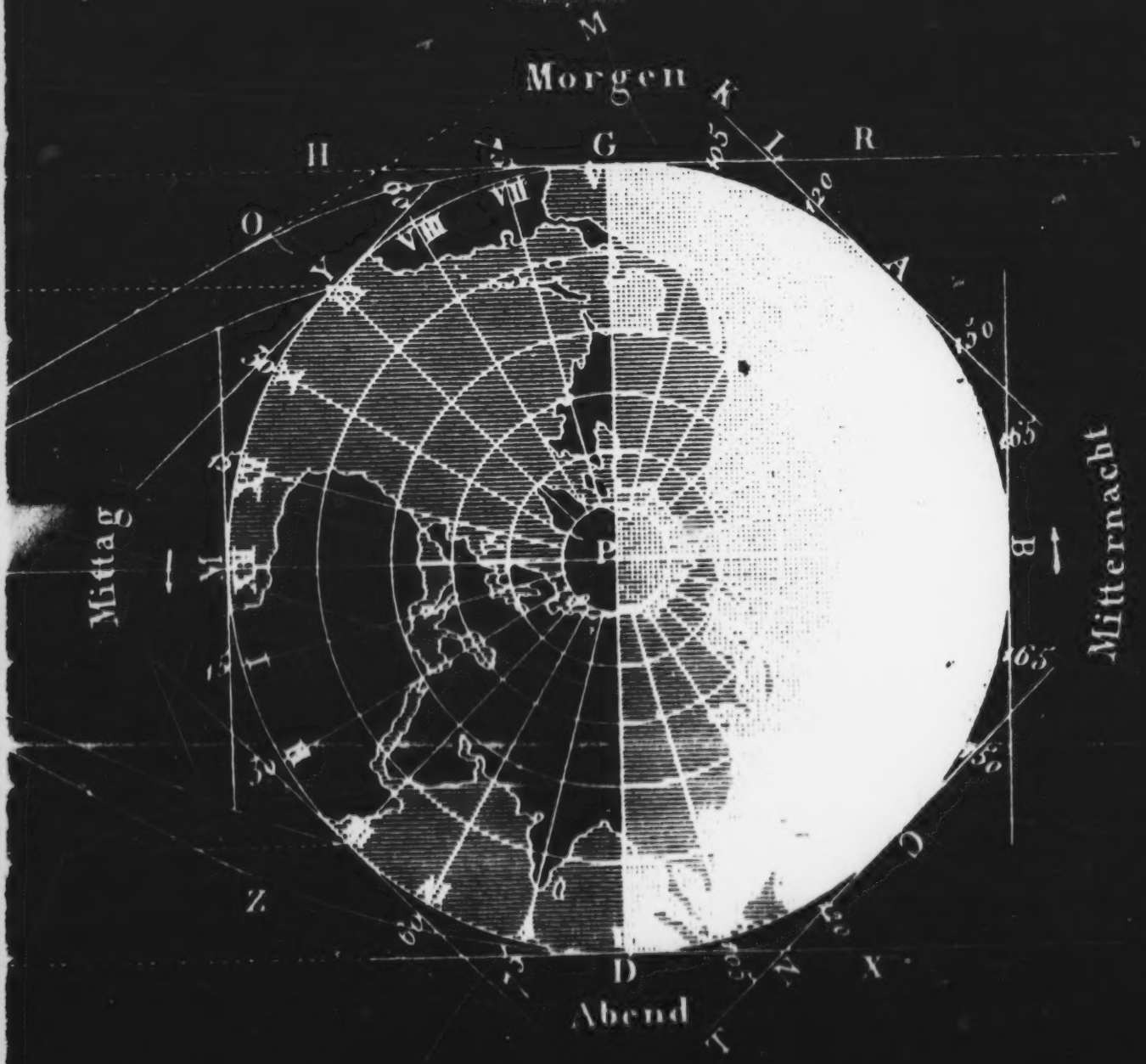
Reuse, Recycle, Restore.

EPA recognizes the value of its employees and strives for effective Human Resources Management. The Agency is equally dedicated to achieving a representative work force. To this end, EPA's policy is to provide equal employment opportunity for everyone, to prohibit discrimination in employment because of race, color, religion, sex, age, national origin, or disability, and to promote the full realization of equal employment opportunities on the basis of merit and fitness through a continuing affirmative employment program.

United States
Environmental Protection
Agency

National Recruitment
Program (PM 224)
Washington DC 20460

EPA 210 K92 010
August 1992



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